

Amendments to the Specification

On page 1, amend the first full paragraph (lines 3-6) as follows:

The present invention is directed to an imaging composition and method. More specifically, the present invention is directed to an imaging composition and method where the imaging composition undergoes a color or shade change upon exposure to energy at low ~~intensities~~powers.

On page 3, amend lines 17-26 as follows:

Summary of the Invention

Imaging compositions include one or more sensitizers in sufficient amounts to affect a color or shade change in the compositions upon application of energy at ~~intensities~~powers of 5mW or less.

In another embodiment the imaging compositions include one or more sensitizers in sufficient amounts to affect a color or shade change in the compositions upon application of energy at ~~intensities~~powers of 5mW or less, and one or more adhesion promoters or an adhesive.

In a further embodiment the imaging compositions include one or more sensitizers in sufficient amounts to affect a color or shade change in the compositions upon exposure to energy at ~~intensities~~powers of 5mW or less, and further including components to form a paint formulation.

On page 4, amend the first full paragraph (lines 1-11) as follows:

Methods of imaging include providing an imaging composition comprising one or more sensitizers in sufficient amounts to affect a color or shade change upon exposure of energy at ~~intensities~~powers of 5mW or less, applying the imaging composition to a work piece; and applying energy at ~~intensities~~powers of 5mW or less to the imaging composition to affect the color or shade change. Alternatively, energy may be applied selectively to form an imaged pattern on the work piece. The color or shade change may be used in the manufacture or repair

of work pieces, to alter the initial color or shade of a work piece, or to vary the color or shade of a work piece upon exposure to suitable energy levels. The imaging compositions and methods provide a rapid and efficient means of changing the color or shade of a work piece or of placing an image on a work piece such as aeronautical ships, marine vessels and terrestrial vehicles, or for forming images on textiles.

On page 4, amend the third full paragraph (lines 16-25) as follows:

The image may be used as a mark or indicator, for example, to drill holes for fasteners to join parts together, to form an outline for making a logo or picture on an airplane, or to align segments of marine vessel parts. Since the compositions may be promptly applied to the work piece and the image promptly formed by application of energy at ~~intensities~~ powers of 5mW or less to create a color or shade contrast, workers no longer need to be adjacent the work piece to mark laser beam images with a hand-held marker or tape in the fabrication of articles.

Accordingly, the problems of blocking light caused by the movement of workers hands and the slower and tedious process of applying marks by workers using a hand-held marker or tape is eliminated. Further, the low ~~intensities~~ powers of energy, which are used to cause the color or shade change, eliminates or at least reduces the potential for ophthalmological damage to workers.

On page 6, amend the second full paragraph (lines 4-12) as follows:

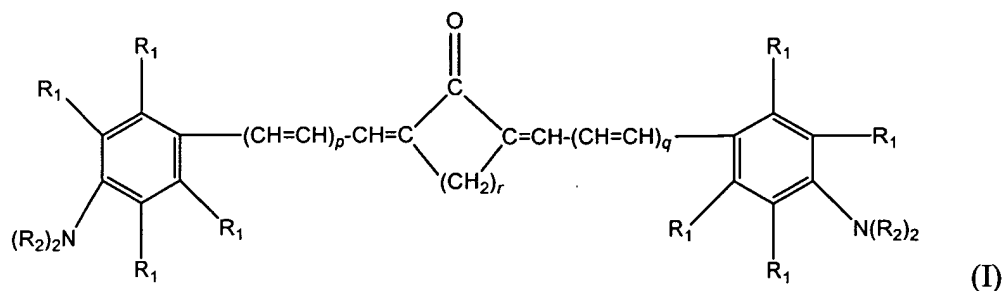
Imaging compositions include one or more sensitizers in sufficient amounts to affect a color or shade change upon exposure to energy at ~~intensities~~ powers of 5mW or less. The imaging compositions may be applied to a work piece followed by applying energy at ~~intensities~~ powers of 5mW or less to affect a color or shade change on the entire work piece, or to form an imaged pattern on the work piece. For example, an imaging composition may be applied selectively to a work piece followed by the application of energy to affect the color or shade change to produce an imaged pattern on the work piece. Alternatively, the imaging composition may cover the entire work piece and the energy applied selectively to affect the color or shade change to form an imaged pattern on the work piece.

On page 6, amend the fourth full paragraph (lines 17-22) as follows:

Sensitizers employed in the compositions are compounds, which are activated by energy to change color or shade, or upon activation cause one or more other compounds to change color or shade. The imaging compositions include one or more photosensitizers sensitive to visible light and may be activated with energy at ~~intensities~~powers of 5mW or less. Generally, such sensitizers are included in amounts of from 0.005wt% to 10wt%, or such as from 0.05wt% to 5wt%, or such as from 0.1wt% to 1wt% of the imaging composition.

On page 6, amend line 31 through page 7, line 6-14 as follows:

Examples of such suitable conjugated cyclopentanones have the following formula:



where p and q independently are 0 or 1, r is 2 or 3; and R1 is independently hydrogen, linear or branched (C1-C10)aliphatic, or linear or branched (C1-C10)alkoxy, typically R1 is independently hydrogen, methyl or methoxy; R2 is independently hydrogen, linear or branched (C1-C10)aliphatic, (C5-C7)ring, such as an alicyclic ring, alkaryl, phenyl, linear or branched (C1-C10)hydroxyalkyl, linear or branched hydroxy terminated ether, such as $-(CH_2)_v-O-(CHR_3)_w-OH$, where v is an integer of from 2 to 4, w is an integer of from 1 to 4, and R3 is hydrogen or methyl and carbons of each R2 may be taken together to form a 5 to 7 membered ring with the nitrogen, or a 5 to 7 membered ring with the nitrogen and with another heteroatom chosen from oxygen, sulfur, and a second nitrogen. Such sensitizers may be activated at ~~intensities~~powers of 5mW or less.

On page 9, amend first full paragraph (lines 5-9) as follows:

One or more reducing ~~agent-agents~~ may be used in the imaging compositions to provide the desired color or shade change. Typically, one or more ~~quinone-is-quinones~~ are used with one or more acyl ester of triethanolamine to provide the desired reducing agent function. Reducing agents may be used in the compositions in amounts of from 0.05wt% to 50wt%, or such as from 5wt% to 40wt%, or such as 20wt% to 35wt%.

On page 14, amend second full paragraph (lines 10-15) as follows:

One or more adhesion ~~promoter-promoters~~ may be included in the imaging compositions to improve cohesion between the imaging compositions and the work pieces. Any suitable adhesion promoter may be used. Such adhesion promoters may be included in amounts of from 0.5wt% to 10wt% or such as from 1wt% to 5wt% of the compositions. Examples of such adhesion promoters include acrylamido hydroxyl acetic acid (hydrated and anhydrous), bisacrylamido acetic acid, 3-acrylamido-3-methyl-butanoic acid, and mixtures thereof.

On page 16, amend first full paragraph (lines 1-11) as follows:

The imaging compositions undergo color or shade changes with the application of ~~intensities-powers~~ of 5mW of energy or less (i.e., greater than 0mW), or such as from less than 5mW to 0.01mW, or such as from 4mW to 0.05mW, or such as from 3mW to 0.1mW, or such as from 2mW to 0.25mW or such as from 1mW to 0.5mW. Typically, such ~~intensities-powers~~ are generated with light sources in the visible range. Other photosensitizers and energy sensitive components, which may be included in the imaging compositions, may elicit a color or shade change upon exposure to energy from light outside the visible range. Such photosensitizers and energy sensitive compounds are included to provide a more pronounced color or shade contrast with that of the response caused by the application of 5mW or less. Typically photosensitizers and energy sensitive compounds, which form the color or shade contrast with photosensitizers activated by energy at ~~intensities-powers~~ of 5mW or less, elicit a phototropic response.